

WRITE-SPOOL

File	203
Op-Sys	OS/390, VSE/ESA, BS2000/OSD
Statement	PROCESS
Task	This view makes it possible to write data directly to spool queues (OS/390: JES, VSE/ESA: POWER). In BS2000/OSD, this view performs a PRINT. See also WRITE-SPOOL Programming Notes at the bottom of this view description.

Common Fields for all Operating Systems

Dictionary Field Name	F/L	Mu	DE	Remarks
ERROR-CODE	N3			
ERROR-TEXT	A58			
NODE	N3		D	
NODE-NAME	A16		D	
SYSTEM-MESSAGE-CODE	A10			
CONTROL	A1		D	
COPIES	B1		D	
DESTINATION	A50		D	
FORM	A8		D	
FUNCTION	A8		D	Required on last request.
RECORD	A253		D	Required.
RECORD-LENGTH	N3		D	Required.

Additional Fields Supported for OS/390

Dictionary Field Name	F/L	Mu	DE	Remarks
CHARS	A64		D	
CLASS	A1		D	
DATA-SET-ID	A54			
DDNAME	A8			
FCB	A4		D	
FLASH	A4		D	
FSSDATA	A8		D	
HOLD	A8		D	
IDENTIFIER	A8		D	Required if multiple update views are executing in parallel.
JOB-ID	A5		D	
JOB-NUMBER	N5		D	
PORTNO	A17		D	
PROGRAM	A8		D	
PRTOPTNS	A17		D	
PRTQUEUE	A127		D	
REMOTE-USERID	A8		D	
TRC	A3		D	

Additional Fields Supported for VSE/ESA

Dictionary Field Name	F/L	Mu	DE	Remarks
BURST	A3		D	
CLASS	A1		D	
COMPACT	A4		D	
COPY-MODIFY-MODULE	A4		D	
COPY-MODIFY-TABLE	A4		D	
DISPOSITION	A1		D	
FLASH-COUNT	N3		D	
JOB-NAME	A8		D	
PROGRAM	A8		D	
SEGMENTATION-SIZE	B4		D	
SEP-PAGES-COPIES	A3		D	
SEP-PAGES-COUNT	B1		D	
TARGET-NODE	A8		D	
UCS	A8		D	
UCS-OPTIONS	A2		D	
USER-INFO	A16		D	

Additional Fields Supported for BS2000/OSD

Dictionary Field Name	F/L	Mu	DE	Remarks
SYSTEM-CODE	B2			
BINARY	A3		D	
CHARS	A64		D	
CHARS-MODIFICATION	A3		D	
CONTROL-OPTION	A16		D	
DEVICE	A8		D	
DIA	A2		D	
DSNAME	A54		D	
ELEMENT	A64		D	
ELEMENT-PASSWORD	A8		D	
ELEMENT-TYPE	A8		D	
ELEMENT-VERSION	A24		D	
END-NUMBER	N5		D	
FROM-LINE-NUMBER	N10		D	
FROM-PAGE-NUMBER	N10		D	
HEADER	A5		D	
HEADER-NUMBER	N10		D	
IDENTIFIER	A8		D	Required if multiple update views are executing in parallel.
IMAGE	A28		D	
JOB-ID	A5		D	
JOB-NAME	A8		D	
JOB-NUMBER	N5		D	
LINES	N3		D	
LOCK	A3		D	
LOOP	A3		D	
PASSWORD	A8		D	
RSO-FILE-NAME	A28		D	
START-NUMBER	N5		D	
TEXT	A32		D	
TO-LINE-NUMBER	N10		D	
TO-PAGE-NUMBER	N10		D	
TRAIL-NUMBER	N10		D	
TRANSLATION-TABLE	A8		D	
TRAY	N1		D	

Relevant Error Codes

Code	Text	OS/390	VSE/ESA	BS2000/OSD
530	Access denied by Security Facility.			X
556	File is in use.	X	X	X
565	Syntax error in dataset name.			X
692	You are not permitted to access member.			X
699	GETVIS failed.	X	X	
701	DSNAME missing.			X
722	Requested dataset not found.			X
733	User ID does not exist.			X
750	Invalid operand within operand list.			X
799	Entire System Server internal error.			X
856	Operator unable to mount volume.			X
870	RECORD field not in search buffer.	X	X	
872	RECFM not supported.	X	X	
873	Record length missing.	X	X	
874	RECORD-LENGTH > LRECL.	X	X	
883	Dataset is full.	X		X
889	Permanent I/O error while writing dataset.	X	X	X
900	Dynamic sysout allocation failed.	X		
901	Dynamic internal read alloc failed.	X		
901	POWER interface is not active.		X	
903	Dynamic allocation failed for temporary dataset.			X
983	LMS not supported by PRINT.			X
985	Access to tape file not allowed.			X
991	Unknown product.	X		X
993	Open error.	X	X	
998	Member not found.	X	X	X

Field Descriptions

Field Name	Type/Length	Operating System
BINARY	(A3)	BS2000/OSD

Print in hexadecimal format or not:

Value	Explanation
NO	Character
YES	Hexadecimal

Field Name	Type/Length	Operating System
BURST	(A3)	VSE/ESA

Burst option. Possible values:

Value	Explanation
NO	Default
YES	

Field Name	Type/Length	Operating System
CHARS	(A64)	OS/390, BS2000/OSD

Four groups of four bytes each, taken from the JCL

```
' ( CHARS= ( AAAA , BBBB , CCCC , DDDD ) '
```

In BS2000/OSD, it is taken from the CHARS parameter of the PRINT command. Possible values:

- AAAA
- AAAABBBB
- AAAABBBBCCCC
- AAAABBBBCCCCDDDD

Sixteen groups of four bytes can be specified for RSO printers (maximum 64 bytes).

Field Name	Type/Length	Operating System
CHARS-MODIFICATION	(A3)	BS2000/OSD

Possible values:

Value	Explanation
YES	Default. All characteristics of character sets are supported.
NO	Only character type, language and near-letter-quality are supported.

Field Name	Type/Length	Operating System
CLASS	(A1)	OS/390, VSE/ESA

SYSOUT class. If omitted, the default class of the Entire System Server node is used.

Field Name	Type/Length	Operating System
COMPACT	(A4)	VSE/ESA

Name of compaction table.

Field Name	Type/Length	Operating System
CONTROL	(A1)	OS/390, VSE/ESA, BS2000/OSD

Carriage control mode:

Value	Explanation
n	(BS2000/OSD) number of new lines after each line.
A	Position 1 is ASA code.
E	SPACE=E (BS2000/OSD).
I	SPACE=I (in BS2000/OSD for IBM carriage control characters).
M	Position 1 is machine code.

Field Name	Type/Length	Operating System
CONTROL-OPTION	(A16)	BS2000/OSD

Possible values:

- NO
- LINEMODE
- LOGICAL
- PHYS
- PHYSICAL
- TRANSPARENT

For an explanation, see the description of the CONTROL parameter of the BS2000/OSD command PRINT.

Field Name	Type/Length	Operating System
COPIES	(B1)	OS/390, VSE/ESA, BS2000/OSD

Number of SYSOUT copies.

Field Name	Type/Length	Operating System
COPY-MODIFY-MODULE	(A4)	VSE/ESA

Copy modification module name.

Field Name	Type/Length	Operating System
COPY-MODIFY-TABLE	(A4)	VSE/ESA

Character arrangement table for copy modification.

Field Name	Type/Length	Operating System
DATA-SET-ID	(A54)	OS/390

Internal dataset name of the SYSOUT file (returned after the CLOSE function).

Field Name	Type/Length	Operating System
DDNAME	(A8)	OS/390

The DDNAME of the spool file.

Field Name	Type/Length	Operating System
DESTINATION	(A50)	OS/390, VSE/ESA, BS2000/OSD

- **OS/390:** Remote destination of this dataset.
May also be specified in the form 'IP:ipaddr' which may be used by a functional subsystem that can perform Internet Protocol (IP) transmission (for example, IP PrintWay).
- **VSE/ESA:** Remote destination of this dataset.
- **BS2000/OSD:** Device type of printer (ND, HP), if the DEVICE field is specified.

Field Name	Type/Length	Operating System
DEVICE	(A8)	BS2000/OSD

RSO printer.

Field Name	Type/Length	Operating System
DIA	(A2)	BS2000/OSD

Form DIA name.

Field Name	Type/Length	Operating System
DISPOSITION	(A1)	VSE/ESA

Disposition to be assigned to spool output.

Field Name	Type/Length	Operating System
DSNAME	(A54)	BS2000/OSD

Name of the file to be printed out. Note that FUNCTION=CLOSE is required to start the printout.

Field Name	Type/Length	Operating System
ELEMENT	(A64)	BS2000/OSD

Name of the LMS element to be written (BS2000/OSD version V10 or above).

Field Name	Type/Length	Operating System
ELEMENT-PASSWORD	(A8)	BS2000/OSD

Password for protected LMS element (BS2000/OSD version V10 or above and LMS V2 or above).

Field Name	Type/Length	Operating System
ELEMENT-TYPE	(A8)	BS2000/OSD

Type of LMS element to be written (BS2000/OSD version V10 or above).

Field Name	Type/Length	Operating System
ELEMENT-VERSION	(A24)	BS2000/OSD

Version of LMS element to be written (BS2000/OSD version V10 or above).

Field Name	Type/Length	Operating System
END-NUMBER	(N5)	BS2000/OSD

Number of the last column in the line to be printed. Value range: 1 <= value <= 32767

Field Name	Type/Length	Operating System
FCB	(A4)	OS/390, VSE/ESA

FCB name.

Field Name	Type/Length	Operating System
FLASH	(A4)	OS/390, VSE/ESA

Flash for 3800.

Field Name	Type/Length	Operating System
FLASH-COUNT	(N3)	VSE/ESA

Flash count.

Field Name	Type/Length	Operating System
FORM	(A8)	OS/390, VSE/ESA, BS2000/OSD

SYSOUT form.

Field Name	Type/Length	Operating System
FROM-LINE-NUMBER	(N10)	BS2000/OSD

Starting line number of output list.

Field Name	Type/Length	Operating System
FROM-PAGE-NUMBER	(N10)	BS2000/OSD

Starting page number of output list.

Field Name	Type/Length	Operating System
FSSDATA	(A8)	OS/390

Specifies data to pass to a functional subsystem (FSS) that controls printing (for example, IP PrintWay). See the documentation for the particular subsystem for additional information.

Field Name	Type/Length	Operating System
FUNCTION	(A8)	OS/390, VSE/ESA, BS2000/OSD

Function to be performed. Possible options:

Option	Explanation
<blank>	Write a record.
CLOSE	All records have been written. Specify this on the last request.
SEGMENT	VSE/ESA only. Create a new POWER segment after writing next line.

Field Name	Type/Length	Operating System
HEADER	(A5)	BS2000/OSD

Print a headline on each page. Possible values are:

Value	Explanation
D	DATE in format YY-MM-DD.
D,T,P	All values are in headline.
NO	No headline.
P	PAGE nnnn.
T	First record is headline.

Field Name	Type/Length	Operating System
HEADER-NUMBER	(N10)	BS2000/OSD

Number of cover pages for the output list. Range of values: 0 <= value <= 2**31 -1

Field Name	Type/Length	Operating System
HOLD	(A8)	OS/390

Possible values:

Value	Explanation
NO	The SYSOUT dataset is not to be held.
YES	The SYSOUT dataset is to be held.

Field Name	Type/Length	Operating System
IDENTIFIER	(A8)	OS/390, BS2000/OSD

Required if multiple update views are executing in parallel, all requests for the same process must have the same identifier.

Field Name	Type/Length	Operating System
IMAGE	(A28)	BS2000/OSD

Specifies a user file which includes LOOP records, character sets, etc.

Field Name	Type/Length	Operating System
JOB-ID	(A5)	OS/390, BS2000/OSD

Returned for FUNCTION=CLOSE.

OS/390 & VSE/ESA:	Job number in alphanumeric format.
BS2000/OSD:	TSN of job in alphanumeric format. This field must be used for V10 or above with alphanumeric TSNs.

Field Name	Type/Length	Operating System
JOB-NAME	(A8)	VSE/ESA, BS2000/OSD

Name of the job under which the output is to be printed.

Field Name	Type/Length	Operating System
JOB-NUMBER	(N5)	OS/390, BS2000/OSD

Returned for FUNCTION=CLOSE.

- OS/390 and VSE/ESA: Job number.
- BS2000/OSD: TSN of job.

Field Name	Type/Length	Operating System
LINES	(N3)	BS2000/OSD

Number of lines per page.

Field Name	Type/Length	Operating System
LOCK	(A3)	BS2000/OSD

Protect output against modifications during wait as Task Type 4. Possible options:

Option	Explanation
NO	Output not protected.
YES	Output protected.

Field Name	Type/Length	Operating System
LOOP	(A3)	BS2000/OSD

Name of LOOP record.

Field Name	Type/Length	Operating System
PASSWORD	(A8)	VSE/ESA, BS2000/OSD

- VSE/ESA: Password of job.
- BS2000/OSD: Password, if the file is protected.

Field Name	Type/Length	Operating System
PORTNO	(A17)	OS/390

Specifies the TCP/IP port number at which a functional subsystem (for example, IP Printway) connects to the printer. See the documentation for the particular subsystem for additional information.

Field Name	Type/Length	Operating System
PROGRAM	(A8)	OS/390, VSE/ESA

Name of writer program to process this dataset.

Field Name	Type/Length	Operating System
PRTOPTNS	(A17)	OS/390

Specifies additional print options a functional subsystem can use when printing a DEST='IP:ipaddr'-routed dataset. See the documentation for the particular subsystem for additional information.

Field Name	Type/Length	Operating System
PRTQUEUE	(A127)	OS/390

Specifies the name of the target print queue on a remote host system. The PRTQUEUE field applies only to datasets processed by a functional subsystem that can perform Internet Protocol (IP) transmission (for example, IP Printway). See the documentation for the particular subsystem for additional information.

Field Name	Type/Length	Operating System
RECORD	(A253)	OS/390, VSE/ESA, BS2000/OSD

Record to be written.

Field Name	Type/Length	Operating System
RECORD-LENGTH	(N3)	OS/390, VSE/ESA, BS2000/OSD

Length of record.

Field Name	Type/Length	Operating System
REMOTE-USERID	(A8)	OS/390

User ID for printing at remote destinations.

Field Name	Type/Length	Operating System
RSO-FILE-NAME	(A28)	BS2000/OSD

Name of translation table for RSO printer. For detailed information, see the description of the TRANSLATION-TABLE parameter (name2) of the BS2000/OSD command PRINT.

Field Name	Type/Length	Operating System
SEGMENTATION-SIZE	(B4)	VSE/ESA

Size (in lines) of each segment to be written.

Field Name	Type/Length	Operating System
SEP-PAGES-COPIES	(A3)	VSE/ESA

Copy separators required. Possible values:

Value	Explanation
NO	Default
YES	

Field Name	Type/Length	Operating System
SEP-PAGES-COUNT	(B1)	VSE/ESA

Number of separator pages.

Field Name	Type/Length	Operating System
START-NUMBER	(N5)	BS2000/OSD

Number of first column in line for print. Range of values: $0 \leq \text{value} \leq 32767$

Field Name	Type/Length	Operating System
TARGET-NODE	(A8)	VSE/ESA

Name of target node.

Field Name	Type/Length	Operating System
TEXT	(A32)	BS2000/OSD

Saved in SPOOL control block (SCB). The first 8 characters are used as text at the header page.

Field Name	Type/Length	Operating System
TO-LINE-NUMBER	(N10)	BS2000/OSD

Ending line number of output list.

Field Name	Type/Length	Operating System
TO-PAGE-NUMBER	(N10)	BS2000/OSD

Ending page number of output list.

Field Name	Type/Length	Operating System
TRAIL-NUMBER	(N10)	BS2000/OSD

Number of trailing pages for the output list. Range of values: $0 \leq \text{value} \leq 2^{31} - 1$

Field Name	Type/Length	Operating System
TRANSLATION-TABLE	(A8)	BS2000/OSD

Name of translation table for RSO printer. For detailed information, see the description of the TRANSLATION-TABLE parameter (name1) of the BS2000/OSD command PRINT.

Field Name	Type/Length	Operating System
TRAY	(N1)	BS2000/OSD

Specifies the tray number. Possible values: 1 - 9.

Field Name	Type/Length	Operating System
TRC	(A3)	OS/390

Value	Explanation
YES	Byte 2 in record used for CHARS (3800) (DCB=OPTCB=J specified).

Field Name	Type/Length	Operating System
UCS	(A8)	VSE/ESA

UCB name.

Field Name	Type/Length	Operating System
UCS-OPTIONS	(A2)	VSE/ESA

UCB options. Possible values:

Value	Explanation
B	Block data check option.
F	Fold option.

Field Name	Type/Length	Operating System
USER-INFO	(A16)	VSE/ESA

User information.

WRITE-SPOOL Programming Notes

WRITE-SPOOL is an UPDATE view, i.e., data is transmitted from the Natural program (CLIENT side) to ESY (server side).

The Entire System Server view WRITE-SPOOL returns codes and messages which describe whether the requested operation has been executed successfully or not.

Therefore, the DEFINE DATA section of the Natural program should only contain the fields shown in this example:

160	1	WRITE-SPOOL VIEW OF WRITE-SPOOL	170	2	ERROR-CODE	180	2	ERROR-TEXT	190	2	SYSTEM-MESSAGE-CODE	200	2	SYSTEM-CODE
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These fields in DEFINE DATA are the fields returned from the WRITE-SPOOL view in Entire System Server to the calling Natural program.

Defining other fields in DDM is not critical, but the access to these fields may lead to unpredictable results.